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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,681	11/08/2001	David G. Barkalow	112703-198	4991
29156	7590	12/16/2005	EXAMINER	
BELL, BOYD & LLOYD LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			SHEIKH, HUMERA N	
			ART UNIT	PAPER NUMBER
			1615	
DATE MAILED: 12/16/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/036,681	Applicant(s) BARKALOW ET AL.	
	Examiner Humera N. Sheikh	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-19 and 25-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-19 and 25-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Status of the Application**

Receipt of Applicant's Response and Arguments/Remarks filed 09/12/05 and 09/22/05 and the request for extension of time (1 month-granted) filed 09/22/05 is acknowledged.

Claims 16-19 and 25-46 are pending. Claims 1-15 and 20-24 have previously been cancelled. Claims 16-19 and 25-46 remain rejected.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**Claims 16-19, 25-39 and 41-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyers (US Pat. No. 5,433,960).**

Meyers teaches an edible film composition and method for making thereof comprising *edible film-forming agents* consisting of effective amounts (~5 to ~25%) of celluloses, cellulose derivatives, modified starches, dextrin, maltodextrins, gelatin, protein, zein, polyols and combinations thereof including at least two materials chosen from carbohydrates (derivatives), celluloses, gums (derivatives), proteins and lipids; *bulk filler agents* (5-95%) and *plasticizers* (~5 to ~15%) wherein the edible film composition also comprises at least one or more *active agents* located in the edible film, which include *dental agents* (i.e., plaque pH buffers/inhibitors,

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minerals, antimicrobial agents, microbial inhibitors, phosphates, sodium bicarbonate, remineralizing agents); flavor enhancers, sweeteners, softeners and antioxidants (see reference column 3, line 15- col. 14, line 18); (col. 6, lines 20-44); (col. 7, line 64 – col. 8, line 29); (col. 9, lines 13-34); (col. 10, lines 15-17); (col. 11, lines 49-55) and claims.

Meyers teaches that suitable water-soluble film forming agents include, asides from the celluloses and starches, edible polymers, edible plastics, low calorie bulking agents, vegetable gums, such as guar gum, locust bean gum, carrageenan gum, alginates, etc. The preferred water-soluble film forming agents are cellulose derivatives, which include ethyl cellulose, methylcellulose, hydroxypropylcellulose and sodium hydroxymethylcellulose. The film-forming agent can be used in amounts of about 5% to about 25% (col. 6, lines 20-50). The percent ranges of film-forming agents taught by Meyers are overlapping ranges with the instant claims (instant range is ~10 - ~90%).

Bulk fillers, such as calcium carbonate, magnesium carbonate, talc, dicalcium phosphate and the like are disclosed in amounts of between 5-95% at col. 9, lines 14-22.

According to Meyers, plasticizers are added to improve the flexibility of the film. Plasticizers mentioned herein include glycerin, polyethylene glycol (PEG), polyols and hydrogenated starch hydrolysates. The plasticizer may be contained in amounts of about 0.5-15% (col. 8, line 7 thru col. 10, line 30) (instant range is <20%).

With regard to the instantly claimed 'method of treating halitosis' (claim 19), it is the Examiner's position that since Meyers explicitly teaches active agents comprised of oral dental care agents, such as pH buffers, plaque inhibitors, antimicrobial agents, phosphates, etc., then one of ordinary skill in the art desiring to improve conditions of bad breath or halitosis, would

turn to the teachings of Meyers, based on the dental care agents taught therein. The dental agents (*i.e.*, plaque inhibitors, antimicrobials) taught by Meyers would be equivalent and applicable towards the treatment of bad breath or halitosis (see col. 11, lines 49-57).

The film composition of Meyers provides for effective film-forming polymers, bulk fillers, flavoring agents, plasticizers, oral/dental care agents, softeners, emulsifiers and the like.

It is the position of the Examiner that given the teachings of Meyers, it would be *prima facie* obvious for one of ordinary skill in the art to use the specifically disclosed combination ingredients of Meyers to provide for a film composition that enables delivery of active ingredients, allows for flexibility of the film, as well as breath freshening, germ killing properties, flavor enhancement, etc. The expected result would be an edible film composition that offers maximal and optimal benefits to the consumer.

**Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyers (US Pat. No. 5,433,960) as applied to claims 16-19, 25-39 and 41-46 above and further in view of Zerbe *et al.* (US Pat. No. 5,948,430).**

Meyers, as discussed above, teaches an edible film composition comprising edible *film-forming agents* consisting of effective amounts (~5 to ~25%) of celluloses, cellulose derivatives, modified starches, dextrans, maltodextrans, etc. and *combinations thereof* including at least two materials chosen from carbohydrates (derivatives), celluloses, gums (derivatives), proteins and lipids; *bulk filler agents* (5-95%) and *plasticizers* (~5 to ~15%).

Meyers teaches various acids that include for example, stearic, lauric, palmitic, arachidic, oleic, linoleic and eladic acids at column 8, lines 5-11. Meyers does not teach an acid from the instant selective group of claim 40 (citric, lactic, malic, ascorbic, succinic, adipic, fumaric, tartaric acid).

**Zerbe *et al.*** teach a water-soluble film composition for oral administration comprising film-forming agents, fillers, plasticizers and flavor-enhancing acids, wherein suitable acids taught include tartaric acid and citric acid (col. 2, line 1 thru col. 3, line 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the particular acids (*i.e.*, tartaric, citric) of the film composition taught by Zerbe *et al.* within the edible film composition of Meyers, because Zerbe *et al.* teach a water-soluble film forming composition comprising cosmetically active agents such as flavor-enhancing acids (*i.e.*, tartaric, citric) which function to provide an enhancement of flavor to the composition and similarly, Meyers teaches an edible water-soluble film forming composition comprising active agents that include flavor enhancers and acids. The expected result would be an edible film-forming composition that imparts enhancement of flavor, taste and freshness in the mouth of the consumer.

#### ***Response to Arguments***

Applicant's arguments filed 09/22/05 have been fully considered but they are not persuasive.

Applicant argued regarding the 35 U.S.C. §103(a) rejection of claims 16-19, 25-39 and 41-46 over Meyers (US 5,433,960) and the 35 U.S.C. §103(a) rejection of claim 40 over Meyers (US 5,433,960) in view of Zerbe et al. (US 5,948,430) stating, "If structural support ingredients were included in the claimed products, 'stand alone films' as required by the claims would not be produced. The phrase 'stand alone' film is described in the specification as meaning a lack of structural support. The art fails to produce a stand-alone film, thus not meeting this claim element, as well as the remaining elements that refer to the stand-alone film. Meyers does not teach or suggest a stand-alone edible film composition as recited in the present claims and in fact teaches away from them. This, in and of itself, demonstrates non-obviousness. Likewise, claim 40 contains the limitation 'stand alone'. Zerbe does not remedy the deficiencies of Meyers, and does not teach, disclose or suggest the stand alone films of the claimed invention."

These arguments have been carefully considered but were not found persuasive. Applicant's arguments of a 'stand alone' edible film is not persuasive since the limitation of a 'stand alone' film is not a change in form that imparts a *patentable* distinction over the films of the art of record. The 'stand alone' film as instantly claimed reads on the chewing gum taught by Meyers. Meyers teaches an edible film composition comprising edible film-forming agents, bulk filler agents, plasticizers, active agents that include dental agents, flavor enhancers, sweeteners, softeners and the like. Thus, Meyers teaches the incorporation of the same ingredients used for the same purpose as that claimed by Applicant. The prior art's film also provides for increased moisture stability, release of active ingredient, flexibility (from plasticizers/softeners), flavor enhancing and germ-killing (due to antimicrobials) and thus sufficiently provides for all properties desired by Applicant's invention. Zerbe *et al.* was relied

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upon for the teaching of specific acids (tartaric & citric acid) in their film and thus clearly resolve the deficiency of Meyers. It is the position of the Examiner that Applicants have not demonstrated any unexpected or surprising results, which accrue from the use of a 'stand alone' film composition. The prior art clearly recognizes and teaches an edible film comprised of the same components for use in the same field of endeavor as the Applicant. Thus, given the explicit teachings of the art, the instant invention when taken as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.




*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Humera N. Sheikh whose telephone number is (571) 272-0604. The examiner can normally be reached on Monday through Friday from 8:00A.M. to 5:30P.M., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page, can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H. N. Sheikh 

*Patent Examiner*

*Art Unit 1615*

December 09, 2005

  
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